

# **New Hampshire CO<sub>2</sub> Budget Trading Program**



## **Offset Project Monitoring and Verification Report**

### **Building Sector Energy Efficiency**

**Version 1.0**

**June 2009**

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## **1. Overview**

To demonstrate the achievement of CO<sub>2</sub>-equivalent emissions reductions from a building sector energy efficiency offset project that has received a consistency determination from the New Hampshire Department of Environmental Services, a Project Sponsor must submit to the New Hampshire Department of Environmental Services in accordance with these instructions a fully completed *Offset Project Monitoring and Verification Report – Building Sector Energy Efficiency Version 1.0* (“*M&V Report*”), consisting of the coversheet and all forms and related attachments. Following these instructions will ensure that the *M&V Report* contains all necessary information and is submitted properly.

The Project Sponsor should review the CO<sub>2</sub> Budget Trading Program regulations (Env-A 4700) addressing offset projects and the award of CO<sub>2</sub> offset allowances. All offset project submittal materials and documents are available at <http://des.nh.gov/organization/divisions/air/tsb/tps/climate/rggi/index.htm>.

## **2. Submission Instructions**

Submit one (1) complete paper hardcopy original and one (1) electronic copy of the *M&V Report* in the form of a CD disk. The Model Rule requires that all offset project documentation, including *Monitoring and Verification Reports*, shall be signed by a Professional Engineer, identified by license number. Submit hardcopies of forms requiring signatures as originally signed copies and scan such signed forms for electronic submission. Facsimiles of the *M&V Report* are not acceptable under any circumstances.

Attention: Joseph T. Fontaine, Trading Programs Manager  
State of New Hampshire Department of Environmental Services Air Resources Division  
P.O. Box 95, 29 Hazen Drive  
Concord, NH 03302-0095

The *M&V Report* has three parts, as described below. Each part comprises specified forms and required documentation. The *M&V Report* has been created as a Microsoft Word document with editable fields. Enter information directly in the fields provided or submit information or documentation as an attachment, as instructed. Include headers on all attachments indicating the form to which each is attached, and the offset project name, and offset project ID code.

The Project Sponsor should save an electronic copy for his or her file to serve as a reference for any necessary remediation.

## **3. M&V Report Forms**

The *M&V Report* consists of eight (8) forms divided into three parts, as follows:

### **Part 1. General Information Forms**

- Form 1.1 – Coversheet
- Form 1.2 – General Information
- Form 1.3 – Attestations
- Form 1.4 – Project Sponsor Statement

- Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting

## **Part 2. Category-Specific Information and Documentation Forms**

- Form 2.1 – Demonstration of Conformance with M&V Plan
- Form 2.2 – Determination of Emissions Reduction

## **Part 3. Independent Verification Form**

- Form 3.1 – Independent Verifier Certification Statement and Report

The following instructions address each of the forms in numerical order. Note that some of the forms include embedded instructions.

## **Part 1. General Information Forms**

The five (5) forms in Part 1 of the *M&V Report* address general requirements applicable to building sector energy efficiency offset projects. Instructions for the Part 1 forms are provided below.

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### **Form 1.1      Coversheet**

Enter the requested information in the editable text fields in the form. Check the boxes to indicate that all forms are being submitted. For information about entering the Project Sponsor, offset project name and offset project ID code, and RGGI COATS account name and number, see instructions below for Form 1.2, General Information.

Submission of all forms, including the Coversheet, is required. If a form is not submitted, the *M&V Report* will not be considered complete for commencement of review by the New Hampshire Department of Environmental Services.

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### **Form 1.2      General Information**

Enter the requested information in the editable text fields in the form. If a text field is not applicable or is unanswerable, enter “NA.” Note the following:

Offset Project ID Code: Enter the offset project ID code. The offset project ID code is the alphanumeric code generated when the Project Sponsor creates a record of the offset project in the RGGI CO<sub>2</sub> Allowance Tracking System (RGGI COATS). See the RGGI COATS User’s Guide for more information about creating an offset project record in RGGI COATS, available at <http://www.rggi-coats.org>.

Project Information: Enter project information. The name of the offset project should be the same name entered by the Project Sponsor when creating a project record in RGGI COATS. The project location entered should be the primary location of the project if the project consists of actions at multiple

locations. The summary narrative of the project should indicate all locations where project actions occur or will occur.

Project Sponsor: Identify the Project Sponsor and provide his or her contact information. The Project Sponsor is the natural person who is the Authorized Account Representative for the RGGI COATS general account identified in the *Consistency Application*.

Project Sponsor Organization: Provide the full legal name of the organization the Project Sponsor represents, including any alternative names under which the organization also may be doing business (e.g., John Doe Enterprises, Inc., d/b/a JDE). If the Project Sponsor is representing himself or herself as an individual, enter "NA".

RGGI COATS General Account Name and Number: Enter the RGGI COATS general account name and number. The RGGI COATS general account identified in the *Consistency Application* is the RGGI COATS account into which any awarded CO<sub>2</sub> offset allowances related to the offset project will be transferred.

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### **Form 1.3      Attestations**

Sign and date the form. Submit the originally signed form as part of the paper hardcopy *M&V Report*. Scan the signed and dated form for submission as part of the electronic version of the *M&V Report*.

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### **Form 1.4      Project Sponsor Statement**

Sign and date the form. Submit the originally signed form as part of the paper hardcopy *M&V Report*. Scan the signed and dated form for submission as part of the electronic version of the *M&V Report*.

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### **Form 1.5      Disclosure of Greenhouse Gas Emissions Data Reporting**

Check the appropriate box in the form to indicate whether greenhouse gas emissions data related to the offset project have been or will be reported to any voluntary or mandatory programs, other than the CO<sub>2</sub> Budget Trading Program. For each program for which data have been or will be reported, provide the program name, the program type (voluntary or mandatory), program contact information (website or street address), the categories of data reported, the frequency of reporting, when the reporting began or will begin, and reporting status (prior, current, future). The Project Sponsor must disclose future reporting related to current commitments made to voluntary programs as well as future reporting mandated by current statutes, regulations, or judicial or administrative orders.

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**Offset Project Name**

**Offset Project ID Code**

## Form 1.1 – Coversheet

**Project Sponsor (RGGI COATS Authorized Account Representative)**

**Project Sponsor Organization**

**Reporting Period**

**RGGI COATS General Account Name**

**RGGI COATS General Account Number**

Check the boxes below to indicate submission of the following required forms:

- ☐ Form 1.2 – General Information
- ☐ Form 1.3 – Attestations
- ☐ Form 1.4 – Project Sponsor Statement
- ☐ Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting
- ☐ Form 2.1 – Demonstration of Conformance with M&V Plan
- ☐ Form 2.2 – Determination of Emissions Reduction
- ☐ Form 3.1 – Independent Verifier Certification Statement and Report

Offset Project Name

Offset Project ID Code

## Form 1.2 – General Information

**Project Sponsor (RGGI COATS Authorized Account Representative)**

Telephone Number

Fax Number

Email Address

Street Address

City

State/Province

Postal Code

Country

**RGGI COATS General Account Name**

**RGGI COATS General Account Number**

**Name of Offset Project**

**Project Commencement Date**

**Summary Description of Offset Project**

**Project City**

**Project County**

**Project State**

**Project Sponsor Organization**

**Primary Street Address**

City

State/Province

Postal Code

Country

**Brief Description of Project Sponsor Organization**

**Telephone Number**

**Website URL**

**Independent Verifier (Company/Organization)**

**States Where Verifier Accredited**

**Primary Street Address**

**Website URL**

City

State/Province

Postal Code

Country

**Point of Contact for Project**

**Contact Telephone Number**

**Contact Fax Number**

**Contact Email Address**

**Contact Street Address**

City

State/Province

Postal Code

Country

Offset Project Name

Offset Project ID Code

### Form 1.3 – Attestations

The undersigned offset Project Sponsor certifies the truth of the following statements:

1. All offset projects for which the Project Sponsor has received CO<sub>2</sub> offset allowances, under the Project Sponsor's or project sponsor organization's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the Project Sponsor or project sponsor organization) are in compliance with all applicable requirements of the CO<sub>2</sub> Budget Trading Program in all participating states.
2. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this *M&V Report* and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

\_\_\_\_\_  
Project Sponsor signature

\_\_\_\_\_  
date

\_\_\_\_\_  
printed name

\_\_\_\_\_  
title

\_\_\_\_\_  
organization

\_\_\_\_\_  
notary

\_\_\_\_\_  
signature of licensed professional engineer

\_\_\_\_\_  
name of licensed professional engineer

\_\_\_\_\_  
license number(s)

\_\_\_\_\_  
license state(s)



Offset Project Name

Offset Project ID Code

### Form 1.4 – Project Sponsor Statement

The undersigned Project Sponsor hereby confirms and attests that the offset project upon which this *Monitoring and Verification Report* is based is in full compliance with all of the requirements of Env-A 4700. The Project Sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. The Project Sponsor understands that eligibility for the award of CO<sub>2</sub> offset allowances under Env-A 4700 is contingent on meeting the requirements of Env-A 4700. The Project Sponsor authorizes the New Hampshire Department of Environmental Services or its agent to audit this offset project for purposes of verifying that the offset project, including the Monitoring and Verification Plan, has been implemented as described in the *Consistency Application* that was the subject of a consistency determination by the New Hampshire Department of Environmental Services. The Project Sponsor understands that this right to audit shall include the right to enter the physical location of the offset project and to make available to the New Hampshire Department of Environmental Services or its agent any and all documentation relating to the offset project at the New Hampshire Department of Environmental Services' request. The Project Sponsor submits to the legal jurisdiction of State of New Hampshire.

\_\_\_\_\_  
Project Sponsor signature

\_\_\_\_\_  
date

\_\_\_\_\_  
printed name

\_\_\_\_\_  
title

\_\_\_\_\_  
organization

\_\_\_\_\_  
notary

Offset Project Name

Offset Project ID Code

## Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting

Check the box below that applies:

- ☐ No greenhouse gas emissions data related to the offset project referenced in this *M&V Report* have been or will be reported to a voluntary or mandatory program other than the CO<sub>2</sub> Budget Trading Program.
- ☐ Greenhouse gas emissions data related to the offset project referenced in this *M&V Report* have been or will be reported to a voluntary or mandatory program other than the CO<sub>2</sub> Budget Trading Program. Information for all such programs to which greenhouse gas emissions data have been or will be reported is provided below.

**Name of Program to which GHG Emissions Data Reported**

Check all that apply:

- ☐ Reporting is currently ongoing  
☐ Reporting was conducted in the past  
☐ Reporting will be conducted in the future  
☐ Reporting is mandatory  
☐ Reporting is voluntary

**Enter Frequency of Reporting**

**Enter Reporting Start Date**

**Program Contact Information – Address**

**Program Website**

**Categories of Emissions Data Reported**

**Name of Program to which GHG Emissions Data Reported**

Check all that apply:

- ☐ Reporting is currently ongoing  
☐ Reporting was conducted in the past  
☐ Reporting will be conducted in the future  
☐ Reporting is mandatory  
☐ Reporting is voluntary

**Enter Frequency of Reporting**

**Enter Reporting Start Date**

**Program Contact Information – Address**

**Program Website**

**Categories of Emissions Data Reported**

Add extra pages as needed.

## Part 2. Category-Specific Information and Documentation Forms

The two (2) forms in Part 2 of the *M&V Report* address category-specific requirements and documentation for building sector end-use energy efficiency offset projects.

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### Form 2.1 Demonstration of Conformance with M&V Plan

Provide documentation as an attachment to Form 2.1 to demonstrate conformance with the M&V Plan. Each attachment must include a header that indicates it is an attachment to Form 2.1 and includes the offset project name and offset project ID code. The following documentation must be provided, as applicable:

1. Documentation of Project Implementation. (*Note: Only applicable to first M&V Report for offset projects that were not completed at the time of Consistency Application submittal.*) Attach documentation that all ECMs were implemented as specified in the *Consistency Application*. The following documentation must be provided, as applicable:
    - a. Documentation of Equipment and Materials Specifications. Provide final post-installation equipment and materials specifications for the as-installed offset project. See the documentation specifications provided in the instructions for Form 2.1, section 6. of the *Consistency Application*.
    - b. Building Plans and Project Technical Schematics. Provide final post-installation building plans and technical schematics representing the as-installed offset project. See the documentation specifications provided in the instructions for Form 2.1, section 7. b. and c. of the *Consistency Application*.
    - c. Documentation of ECM Installation. Provide final post-installation documentation of ECM installation for the as-installed offset project. See the documentation specifications provided in the instructions for Form 2.2, section 1. of the *Consistency Application*.
    - d. HVAC Installation Best Practice. If applicable, provide documentation confirming application of the design intent statements provided in the *Consistency Application*. See the documentation specifications provided in the instructions for Form 2.2, section 2. of the *Consistency Application*.
  2. Quality Assurance/Quality Control (QA/QC) Report. Provide a QA/QC report documenting the activities conducted during the reporting period for QA/QC of project monitoring data and documentation in conformance with the QA/QC procedures specified in the M&V Plan and summarizing findings and any remedial actions taken.
- 

### Form 2.2 Determination of Emissions Reduction

Provide documentation of reporting period energy use and CO<sub>2</sub> emissions reductions where requested in Form 2.2 or as an attachment, as directed. Each attachment must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code. For each fuel type, enter baseline year and reporting year energy use,

reporting year energy savings relative to baseline year energy use, and associated CO<sub>2</sub> emissions reductions (in lbs CO<sub>2</sub>). Enter the following in the form:

- **Baseline Energy Use:** Enter total annual baseline energy use by fuel type for all isolated end-uses or building systems targeted by eligible ECMs (MMBtu).
- **Reporting Period Energy Use:** Enter total annual reporting period energy use for all isolated end-uses or building systems targeted by eligible ECMs (MMBtu).
- **Energy Savings:** Enter total annual reporting period energy savings relative to the baseline year for all isolated end-uses or building systems targeted by eligible ECMs (MMBtu).
- **Emissions Reductions:** Enter total annual reporting period CO<sub>2</sub> emissions reductions due to total annual energy savings, in lbs CO<sub>2</sub>, by applying the appropriate emissions and oxidation factors shown in the example table below.

An example table is provided below.

	<i>Natural Gas</i>	<i>Propane</i>	<i>Fuel Oil</i>	<i>Kerosene</i>	<i>Other</i>
baseline fuel use					
post-installation use					
annual energy savings					
emissions factor	116.98	139.04	161.27	159.41	
oxidation factor	0.995	0.995	0.99	0.99	
emissions reductions					

Attach documentation supporting calculations of reporting year energy use and CO<sub>2</sub> emissions reductions. Documentation must include the following:

1. **Documentation of Energy Monitoring Approach.** Provide narrative documentation of the energy monitoring procedures used to determine reporting period energy use, including demonstration of conformance with the appropriate guidelines and standards applicable to the building types included in the offset project, as follows:

- Commercial Buildings:
  - IPMVP Volume 1, Option B or D, as applicable
  - ASHRAE Guideline 14-2002
- Commercial Buildings, where the only change to the building as part of the energy efficiency project involves eligible ECMs included in the offset project:
  - IPMVP Volume 1, Option C
  - ASHRAE Guideline 14-2002
- New Commercial Buildings:
  - IPMVP Volume III, Option D
  - ASHRAE Guideline 14-2002
- Residential Buildings:
  - RESNET National Home Energy Rating Technical Guidelines, 2006

Documentation of conformance with the above-listed references must include the following:

- Clear identification of any data gaps and estimated or modeled data
- Documentation of all conditions that affect reporting period measurement (e.g., measurement process and equipment, weather, building occupancy, time of day)

Note, for projects implementing similar measures in multiple residential buildings, a representative sampling of buildings may be used to determine reporting period energy use, rather than measurement of each building. If sampling was employed during the reporting period, attach a copy of the sampling protocol used that provides demonstration at a 95 percent confidence interval that the reported value is within 10 percent of the true value. The sampling protocol and statistical method must include uncertainty and confidence interval calculations.

2. Reporting Year Energy Use Data. Provide documentation of reporting year energy use for each building included in the offset project, as outlined below:

- a. Commercial Buildings. For each building included in the offset project, provide total building fuel consumption data for the reporting year, by fuel type (MMBtu). For each building, provide records of whole-building metered energy use by fuel type for the reporting year and records of metered energy use, if available, for individual end-uses or building systems targeted by eligible ECMs.
- b. Low-Rise Residential Buildings. For each building included in the offset project, provide total building fuel consumption data for the reporting year, by fuel type (MMBtu). For each building, provide records of whole-building metered energy use by fuel type for the reporting year and records of metered energy use, if available, for individual end-uses or building systems targeted by eligible ECMs.

3. Isolation of Energy Use. Provide documentation of the isolation of energy use for each end-use or building system targeted by eligible ECMs as part of the offset project. Such isolation must ensure that each eligible ECM is isolated from all other eligible and non-eligible ECMs, as well as from overall building energy use. There are two options for isolation of energy use for end-uses or building systems targeted by eligible ECMs:

- Direct metering of end-use or building system affected by eligible ECMs (note that if the only change to the building as part of the energy efficiency project involves eligible ECMs included in the offset project, metering of whole-building energy use is sufficient under this approach)
- Use of energy simulation modeling to apportion building energy use to each end-use or building system affected by eligible ECMs

For both of these options, ECMs must be isolated from whole-building or whole-system energy use and also adjusted for areas where multiple ECMs interact with one another (required to avoid double-counting of ECM energy use) or where one ECM utilizes more than one eligible fuel type. Provide a narrative identifying the procedures used to isolate energy use for end-uses or building systems targeted by ECMs in conformance with the following guidelines and/or standard applicable to the building types included in the offset project, as follows:

- Commercial Buildings:
  - ASHRAE Guideline 14-2002
  - ASHRAE 90.1-2004, Section 11 and Appendix G
- Residential Buildings:
  - RESNET National Home Energy Rating Technical Guidelines, 2006

If energy simulation modeling is used to isolate energy use, provide the following documentation:

- Building simulation software input file, output file, and assumptions, on CD-ROM
- Copy of software manufacturer literature showing the modeling program name and version number
- Document demonstrating that software is BESTEST or RESNET certified, as applicable

4. Adjustments to Reporting Year Energy Use. Provide documentation of adjustments that were made to reporting year energy use to address operating and weather conditions. Provide documentation of measurement conditions during the reporting year that are unusual or that changed between the baseline period and reporting period, and adjustment factors that were applied to reporting year energy use to account for such measurement conditions. Adjustments may address issues such as weather, building occupancy, and changes in building use or function. Provide documentation of adjustments applied to reporting year energy use in accordance with the following equation:

$$\text{Energy Use (MMBtu)} = EU_{AECM} \times A_b$$

where:

- $EU_{AECM}$  = Annual energy use by fuel type (MMBtu) attributable to the application(s) targeted by the energy conservation measure(s).
- $A_b$  = An adjustment factor that corrects for changes to the system of interest between when the baseline data were collected and the reporting year.

Provide documentation demonstrating that the application of any adjustments are consistent with the following guidelines and/or standards:

- Commercial Buildings:
  - ASHRAE Guideline 14-2002
  - ASHRAE 90.1-2004, Section 11 and Appendix G
- Residential Buildings:
  - RESNET National Home Energy Rating Technical Guidelines, 2006

If any of the adjustments applied above required energy simulation modeling, provide the following documentation:

- Building simulation software input file, output file, and assumptions, on CD-ROM
- Copy of software manufacturer literature showing the modeling program name and version number

- Document demonstrating that software is BESTEST or RESNET certified, as applicable

5. Total Reporting Year Energy Use. Provide a spreadsheet documenting the calculation of total reporting year energy use. Reporting year energy use is the sum of energy use, by combustion fuel type, for all the isolated end-uses or building systems that are affected by ECMs included in the offset project. Reporting year energy use includes the application of any adjustment factors in accordance with section 3. above.

6. Reporting Year CO<sub>2</sub> Emissions. Provide a spreadsheet documenting the calculation of reporting year CO<sub>2</sub> emissions derived from energy use and associated fuel-specific emissions and oxidation factors. Use the following formula to calculate total (summed over all combustion fuel types) reporting year CO<sub>2</sub> emissions in lbs of CO<sub>2</sub>. Calculate each combustion fuel's emissions contribution separately in accordance with the following equation:

$$Emissions \text{ (lbs CO}_2\text{)} = \sum_{i=1}^n (EU_i \times EF_i \times OF_i)$$

where:

$EU_i$  = Reporting year energy use for fuel type  $i$  (MMBtu)

$EF_i$  = Emissions factor (lbs CO<sub>2</sub>/MMBtu) for fuel type  $i$  as shown below in Table 1

$OF_i$  = Oxidation factor for fuel type  $i$  as shown below in Table 1

**Table 1. Emissions and Oxidation Factors**

Fuel	Emissions Factor (lbs. CO <sub>2</sub> /MMBtu)	Oxidation Factor
Natural Gas	116.98	0.995
Propane	139.04	0.995
Distillate Fuel Oil	161.27	0.99
Kerosene	159.41	0.99

Offset Project Name

Offset Project ID Code

### Form 2.1 – Demonstration of Conformance with M&V Plan

Attach documentation that procedures and protocols specified in the M&V Plan were performed and records specified in the M&V Plan were generated and retained. Each attachment must include a header that indicates it is an attachment to Form 2.1 and includes the offset project name and offset project ID code.

Check the boxes below to indicate that the following required documentation is attached:

- ☐ 1. Documentation of Project Implementation (required only for first M&V Report, if applicable). Documentation of project implementation for projects not completed as of submission of *Consistency Application*, including:
  - ☐ A. Final post-installation equipment and materials specifications for as-installed offset project
  - ☐ B. Final post-installation building plans and technical schematics representing as-installed offset project
  - ☐ C. Final post-installation documentation of ECM installation for as-installed offset project
  - ☐ D. Confirmation of application of design intent statement for HVAC installation best practice (as applicable)
- ☐ 2. Quality Assurance/Quality Control (QA/QC) Report. Report documenting QA/QC of project monitoring and documentation during the reporting period.



Offset Project Name

Offset Project ID Code

## Form 2.2 – Determination of Emissions Reductions

Provide documentation of reporting period energy use and CO<sub>2</sub> emissions reductions where indicated in the form or as an attachment, as directed below. Each attachment must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code.

	Natural Gas	Propane	Fuel Oil	Kerosene	Total
Baseline fuel use					
Post-installation use					
Annual energy use savings					
Emissions factor	116.98	139.04	161.27	159.41	
Oxidation factor	0.995	0.995	0.99	0.99	
Emissions reductions					

Check the boxes below to indicate that the following required documentation is attached:

- ☐ 1. Documentation of Energy Monitoring Approach. Narrative documentation of energy monitoring procedures used during reporting period to determine energy use for each building included in the offset project. If project eligible for use of representative sampling, copy of sampling protocol (for projects implementing similar ECMs in multiple residential buildings).
- ☐ 2. Reporting Year Energy Use Data. Documentation of energy use for each building included in offset project.
- ☐ 3. Isolation of Energy Use. Documentation of isolation of energy use for each end-use or building system targeted by eligible ECMs.
- ☐ 4. Adjustments to Reporting Year Energy Use. Documentation of adjustments to address operating and weather conditions, as applicable.
- ☐ 5. Total Reporting Year Energy Use. Spreadsheet documenting calculation of total reporting year energy use.
- ☐ 6. Reporting Year CO<sub>2</sub> Emissions. Spreadsheet documenting calculation of reporting year CO<sub>2</sub> emissions

### **Part 3. Independent Verification Form**

The form in Part 3 of the *M&V Report* addresses requirements and documentation related to the independent verifier certification statement and report. Instructions for the form in Part 3 are provided below.

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#### **Form 3.1 Independent Verifier Certification Statement and Report**

An accredited independent verifier and licensed professional engineer must sign and date the form. Submit the originally signed form as part of the paper hardcopy *M&V Report*. Scan the signed and dated form for submission as part of the electronic version of the *M&V Report*.

Provide the independent verifier's report as an attachment to Form 3.1. The verifier report must include a header that indicates it is an attachment to Form 3.1 and includes the offset project name and offset project ID code.

The verifier report must document the following:

1. The verifier has reviewed the entire *M&V Report* and evaluated the contents of the report in relation to the applicable requirements of Env-A 4700.
2. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to determine CO<sub>2</sub>-equivalent emissions reductions in accordance with Env-A 4708, and the documentation required in the *M&V Report*.
3. The verifier has evaluated the adequacy and consistency of methods used by the Project Sponsor to quantify, monitor, and verify CO<sub>2</sub>-equivalent emissions reductions in accordance with the applicable requirements of Env-A 4708 and the Monitoring and Verification Plan submitted as part of the *Consistency Application*.

The verifier report must include the following contents, in the order listed below:

- Cover page with report title and date
- Table of contents
- List of acronyms and abbreviations
- Executive summary
- Description of objective of report
- Identification of the client, including name, address, and other contact information
- Identification of the offset project
- Description of evaluation criteria (applicable regulatory provisions and documentation required in the *M&V Report*)
- Description of the review and evaluation process, including any site visits and interviews
- Identification of individuals performing the verification work, including the verification team leader and key personnel, and contact information for the team leader

- Description of the materials provided to the verifier by the Project Sponsor
- Evaluation conclusions and findings, including level of assurance provided

Offset Project Name

Offset Project ID Code

### Form 3.1 – Independent Verifier Certification Statement and Report

An accredited verifier and licensed professional engineer must sign and date the form. Attach the accredited verifier report. The attached accredited verifier report must include a header that indicates it is an attachment to Form 3.1 and includes the offset project name and offset project ID code.

Name of Accredited Independent Verifier

I certify that the accredited independent verifier identified above reviewed this *M&V Report*, including all forms and attachments, in its entirety, including a review of the following:

1. The verifier has reviewed the entire *M&V Report* and evaluated the contents of the report in relation to the applicable requirements of Env-A 4700 and the required documentation that must be provided in the *M&V Report*.
2. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to determine CO<sub>2</sub>-equivalent emissions reductions in accordance with Env-A 4708, and the required documentation that must be provided in the *M&V Report*.
3. The verifier has evaluated the adequacy and consistency of methods used by the Project Sponsor to quantify, monitor, and verify CO<sub>2</sub>-equivalent emissions reductions in accordance with Env-A 4708 and the Monitoring and Verification Plan submitted as part of the *Consistency Application*.

A verification report is attached that documents the verifier's review of the items listed above and includes evaluation conclusions and findings.

\_\_\_\_\_  
Verifier Representative signature

\_\_\_\_\_  
date

\_\_\_\_\_  
printed name

\_\_\_\_\_  
title

\_\_\_\_\_  
notary

\_\_\_\_\_  
signature of licensed professional engineer

\_\_\_\_\_  
name of licensed professional engineer

\_\_\_\_\_  
license number(s)

\_\_\_\_\_  
license state(s)